MARYLAND HISTORICAL TRUST DETERMINATION OF ELIGIBILITY FORM

	no
Nu	mber: S-512
	Zip Code: 21851
ity	3
val	uated a district? yes

Property Name: US 13 Northbound Bridge over CSX Railroad Tracks Inventory Address: US 13 Northbound over CSX tracks City: Pocomoke City USGS Topographic Map: Pocomoke C County: Somerset Maryland State Highway Administration Is the property being of Owner: Tax Map Number: Tax Account ID Number: Tax Parcel Number: Project: Mid-20th Century Highway Bridges of Maryland (1948-1960) Agency: Maryland State Highway Administration Site visit by MHT staff: X no yes Name: Date: Is the property is located within a historic district? X no If the property is within a district District Inventory Number: NR-listed district yes Eligible district Name of District: Preparer's Recommendation: Contributing resource Non-contributing but eligible in another context yes no If the property is not within a district (or the property is a district) Preparer's Recommendation: Eligible X yes XA B X C Considerations: G X None Criteria: D. Documentation on the property/district is presented in: Description of Property and Eligibility Determination: (Use continuation sheet if necessary and attach map and photo) Description The US 13 Northbound Bridge (MIHP # S-512, Bridge 1900401) was erected in 1956-1957 over the Pennsylvania Railroad tracks, currently owned by CSX, just west of the Pocomoke River and downtown Pocomoke City in Somerset County. Built as part of the development of US 13 on Maryland's Eastern Shore, the highway was widened and, in places, rerouted in order to address rapidly increasing traffic demands in the 1950s. Additionally, the bridge was erected as part of the State Roads Commission's efforts to eliminate dangerous at-grade railroad crossings. The bridge is a steel girder structure, as were most of the other bridges built by the state as part of its at-grade elimination program. It has undergone no notable alterations since its construction and retains its integrity. Determination of Eligibility The US 13 Northbound Bridge over the CSX Railroad tracks is recommended eligible for National Register of Historic Places listing under National Register Criteria A and C. It has not been altered beyond the standard actions necessary to maintain a busy highway bridge and retains all seven National Register elements of integrity. The bridge is eligible under Criterion A for MARYLAND HISTORICAL TRUST REVIEW Eligibility not recommended Eligibility recommended Criteria: A C D Considerations: A **MHT Comments** Reviewer, NR Program (Date

Inventory Number: S-512 Name: US 13 Northbound Bridge over CSX Railroad Tracks Page 2 its association with two significant mid-twentieth-century trends in Maryland's history—the modernization by the State Roads Commission of the principal roads on the Eastern Shore of Maryland in response to heavy post-World War II-era traffic demands and the state's program of eliminating dangerous at-grade railroad crossings during the period. The bridge's eligibility under this Criterion is local with a period of significance of 1957. The US 13 Northbound Bridge over the CSX Railroad tracks is not National Register-eligible under Criterion B, as it is not associated with an individual significant on the local, state, or national level. This bridge is eligible under Criterion C at the local level, with a period of significance of 1957. It retains sufficient integrity to represent a common bridge type—the steel girder—that is supported by fluted Monotube pile bents. The principal characterdefining elements of its superstructure (rolled I-beams) and of its substructure (abutments and concrete piers) are intact. National Register-eligibility under Criterion D was not investigated as part of this study. Prepared by: Marvin Brown Date Prepared: 10/15/2004

NR-ELIGIBILITY REVIEW FORM

MARYLAND HIS Eligibility recomn			Eligibi	lity not	recomi	mended					
Criteria: A MHT Comments	В	С_	D Considerations:	_ A _	В	C	D	E	_ F	_ G _	None
Reviewer, Office of Preservation Services								Date			
Reviewer, NR Program							Date				

MIHP# S-512 US 13 Northbound Bridge over CSX Railroad Tracks Pocomoke vic. 1957

Bridge No. 1900401, built in 1957, carries US 13 Northbound over the CSX Railroad tracks in Somerset County. The bridge runs east-west and carries two lanes of vehicular traffic. The bridge spans the CSX (originally Pennsylvania, then Norfolk and Southern, and then Conrail) Railroad tracks with a vertical clearance of approximately 24 feet. The bridge is approximately 215 feet in length and almost 35 feet wide. Patterned steel joint plates are located at each end of the bridge deck. It appears that the deck has been surfaced with blacktop within the past ten years. The substructure of the bridge is composed of two Monotube pile bents, each of which consists of 13 painted, concrete-filled fluted steel columns on concrete crash walls. Seven steel beams that run the length of the structure support the concrete deck. Shorter cross beams are staggered across the width of the structure. Concrete panel abutments are located at each end of the bridge. The bridge retains its original parapets.

The US 13 Northbound Bridge (MIHP # S-512, Bridge 1900401) was erected in 1956-1957 over the Pennsylvania Railroad tracks, currently owned by CSX, just west of the Pocomoke River and downtown Pocomoke City in Somerset County. Built as part of the development of US 13 on Maryland's Eastern Shore, the highway was widened and, in places, rerouted in order to address rapidly increasing traffic demands in the 1950s. Additionally, the bridge was erected as part of the State Roads Commission's efforts to eliminate dangerous at-grade railroad crossings. The bridge is a steel girder structure, as were most of the other bridges built by the state as part of its at-grade elimination program. It has undergone no notable alterations since its construction and retains its integrity.

Inventory No. S-512

Maryland Historical Trust Maryland Inventory of Historic Properties Form

1. Name of F	Property	(indicate preferred	name)		
historic	US 13 Northbo	und Bridge over the Pennsy	lvania Railroad		
other	Bridge No. 190	0401, US 13 Northbound B	Bridge over the CS.	X Railroad	
2. Location					
street and number	US 13 Northbo	und at CSX Railroad Track	S		N/A not for publication
city, town	Pocomoke City	,			x vicinity
county	Somerset				
3. Owner of	Property	(give names and mailing	g addresses of all	owners)	
name	Maryland State	Highway Administration			
street and number	707 N. Calvert	Street		telephone	410-545-0300
city, town	Baltimore		state MD	zip code	21202
4. Location	of Legal D	escription			
courthouse, registry				liber folio	
city, town	_	tax map	tax parcel	tax I	D number
Contril Deterr Record Histori x Other:	buting Resource in mined Eligible for mined Ineligible for ded by HABS/HA ic Structure Repo	rt or Research Report at Mh	yland Register		
6. Classifica	tion				
Categorydistrictbuilding(s) _x_structuresiteobject	Ownership	Current Function agriculturecommerce/tradedefensedomesticeducationfunerarygovernmenthealth care	landscape recreation/ religion social x transportat work in pro unknown vacant/not		Noncontributing buildings sites structures objects Total
		industry	other:		y listed in the Inventory

7. Description				Inventory No. S-512	
(Condition				
	excellent good	deteriorated ruins			

Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

7 Description

x_ fair

altered

Bridge No. 1900401, built in 1957, carries US 13 northbound over the CSX Railroad tracks in Somerset County. The bridge is located in a somewhat rural area just north of Pocomoke City. The railroad tracks do not appear to be used on a regular basis. The ravine through which the railroad tracks run is lined with mature trees and other vegetation. The bridge runs east-west and carries two lanes of vehicular traffic. Concrete sidewalks carry pedestrian traffic on both sides of the bridge.

The bridge spans the CSX (originally Pennsylvania, then Norfolk and Southern, and then Conrail) Railroad tracks with a vertical clearance of approximately 24 feet. The bridge is approximately 215 feet in length and almost 35 feet wide. Each lane of traffic is approximately 15 feet wide. The north sidewalk is approximately three feet wide while the south sidewalk is more narrow, measuring just less than two feet wide. Metal drainage grates are located in each sidewalk. Patterned steel joint plates are located at each end of the bridge deck. It appears that the deck has been surfaced with blacktop within the past ten years. The approaches of the bridge have a fresh coat of blacktop.

The substructure of the bridge is composed of two Monotube pile bents, each of which consists of 13 painted, concrete-filled fluted steel columns on concrete crash walls. Seven steel beams that run the length of the structure support the concrete deck. Shorter cross beams are staggered across the width of the structure. Concrete panel abutments are located at each end of the bridge.

The bridge retains its original parapets. The rail portion consists of 3 horizontal bars on the north and south ends of the bridge and 4 horizontal bars across the middle of the structure. The vertical members of the rail are spaced approximately 3 feet apart. The rail curves down to the ground on each end of the bridge. The date "1956" is inscribed in the concrete curb at the southeast and northwest corners of the bridge.

The bridge appears to be in fair condition. It appears to have undergone no alterations aside from regular deck resurfacing and maintenance procedures. Several areas of rust are present on the railing. Plant growth is present on the tops of both of the piers just below the bridge deck. The joint plate on the sidewalk at the southeast corner of the bridge is mangled. The joint plate on the south end of the roadway is loose and makes noise when it is run over by vehicles. A 2001 engineer's follow-up report also noted corrosion issues.

8. Signification	ance		Inventory No. S-512		
Period	Areas of Significance	Check and	justify below		
1600-1699 1700-1799 1800-1899 1900-1999 2000-	agriculture archeology architecture art commerce communications community planning conservation	economics education engineering entertainment/ recreation ethnic heritage exploration/ settlement	 health/medicine industry invention landscape archit law literature maritime history military 	performing arts philosophy politics/government ecture religion science social history x_ transportation other:	
Specific dates	1956-1957		Architect/Builder	Maryland State Roads Commission	
Construction da	ites 1956-1957				
Evaluation for:					
x	National Register		Maryland Register	not evaluated	

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance projects, complete evaluation on a DOE Form – see manual.)

Statement of Significance

The US 13 Northbound Bridge (MIHP # S-512, Bridge 1900401) was erected in 1956-1957 over the Pennsylvania Railroad tracks, currently owned by CSX, just west of the Pocomoke River and downtown Pocomoke City in Somerset County. Built as part of the development of US 13 on Maryland's Eastern Shore, the highway was widened and, in places, rerouted in order to address rapidly increasing traffic demands in the 1950s. Additionally, the bridge was erected as part of the State Roads Commission's efforts to eliminate dangerous at-grade railroad crossings. The bridge is a steel girder structure, as were most of the other bridges built by the state as part of its at-grade elimination program. It has undergone no notable alterations since its construction and retains its integrity.

Historic Background and Support

In the early twentieth century, US 13 became an important north-south route through the Delmarva Peninsula. It connected the agricultural areas of the Eastern Shore of Virginia and Maryland, as well as those of southern Delaware, with the urban markets of Wilmington and Philadelphia. Historically, it has been one of the principal routes through Delaware, where it is known as the Dupont Highway or Parkway. One historian noted that US 13 in Delaware is the longest signed highway in the state and summarized its twentieth-century history:

The origins of the Dupont Highway predate the U.S. Highway system. T. Coleman du Pont, an engineer of the Delaware famous du Pont family, envisioned a paved route traveling statewide from south to north. Coleman du Pont proposed the project to the citizens of Delaware in 1908. His concept entailed the creation of separate north and southbound lanes, trolley lines, and pathways for horse-drawn vehicles. By 1924 a two-lane version of the highway opened to traffic between the southern agricultural areas and the urbanized center of Wilmington. The road was a huge success and by 1933 the State Highway Department expanded the highway, making it the world's first divided highway.

In Maryland, the route was so busy that by the early 1930s the state was compelled to construct a bypass for it around Salisbury. This new roadway was in turn engulfed by traffic and new commercial development, requiring "a bypass of the original bypass" in the 1950s. US 13 was improved as well during the decade at the smaller communities of Princess Anne and Pocomoke City.

In 1952, as part of a proposed twelve-year road construction program, the State Roads Commission noted that "traffic demands make it mandatory that new roads be developed in locations such as the Pocomoke By-Pass." These demands were associated more with

¹ http://www.aaroads.com/delaware/us-013.htm

² http://www.mdroads.com/routes/us013.html

Inventory No. S-512

Maryland Historical Trust Maryland Inventory of Historic Properties Form

Name Bridge No. 1900401, US 13 Northbound bridge over the Pennsylvania Railroad Continuation Sheet

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increased automobile ownership and mobility than population pressures in Somerset County. In fact, Somerset County lost rather than gained population during the 1950s.⁴ During the last half of 1954 and first half of 1955, the Commission received a bid for the construction of a steel beam bridge over the tracks of the Pennsylvania Railroad at the Pocomoke By-Pass.⁵

The State Roads Commission erected the US 13 Northbound Bridge in 1956-1957, selecting a metal girder bridge for the location. The date 1956 is inscribed in the concrete curbs at its southeast and northwest corners. The bridge's original drawings state that it was built under State Roads Commission specifications for materials and construction dated 1948 and 1951. According to Maryland SHA files, American Association of State Highway Officials standard specifications for the design of highway bridges, dated 1953, were utilized in its design as well.

The Commission report of 1957 depicts thumbnail "before" and "after" photographs of construction work on US 13 in District 1, including photographs of this crossing. The caption notes: "Included in the dualization of US 13 are the by-passing of both Princess Anne and Pocomoke. The first leg of the Pocomoke By-Pass is a grade-crossing elimination just west of the town, in Somerset County. Shown here is the dangerous crossing at grade and in the background the new railway overpass." 6

The elimination of at-grade crossings was of great concern to highway planners and designers in the mid-twentieth century, throughout the nation as well as in Maryland. Spero, in her context for the state's highway bridges, notes:

Reacting to a half century of fatal accidents, federal legislation of 1934 mandated a complete nationwide study of all railroad grade crossings where railroad tracks intersected roads directly at grade. Maryland responded with the January 1935 report *Railroad Grade Crossings in the State of Maryland*, which found a total of 921 such crossings and recommended their elimination via construction of overpasses or underpasses. Many such grade crossing elimination structures remain in service on Maryland's roads and railroads.⁷

This structure is among those replaced mid-century that continues to carry traffic.

Metal girder bridges were first constructed out of iron in the mid-nineteenth century. The technology was improved during the first third of the twentieth century by the introduction and spread of concrete-encased, steel, rolled-I-beam structures and of deep-steel-beamed structures supporting decks of reinforced concrete. Following the lull in most bridge construction during World War II, metal girder bridges, particularly those with deep steel beams, "were readily built by county and municipal officials across the United States." Between 1920 and 1965 in Maryland, and particularly after the War, "the State Roads Commission utilized metal I-beams and metal plate girders (many concrete encased) heavily in construction for grade crossing elimination structures, as well as ordinary highway bridges." Of the 586 bridges erected by the Commission between 1948 and 1960, 448--more than 75 percent--were metal rolled girder bridges. This bridge is one of 96 completed during 1957. Metal girder bridges were clearly the bridge of choice during the period.

8 Ibid, 105-112.

³ State Roads Commission, Proposed Twelve-Year Program for Road Construction and Reconstruction, 1954-1965, 1952, page 11.

⁴ According to federal census figures, Somerset County's population dropped from 20,745 in 1950 to 19,623 in 1960 (http://www.census.gov/population/cencounts/md190090.txt).

⁵ State Roads Commission, Report of the State Roads Commission of Maryland, 1956, page 64.

⁶ State Roads Commission, On Our Way, 1957, no page number.

⁷ Spero, P.A.C., & Company, Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report, 1995, pages 31.

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Monotube pile bents support the bridge. Monotube is a proprietary pile that has been available since the early 1920s. A cold-rolled steel tube filled with concrete, it was popular in Maryland bridges from the 1950s through the 1970s. The distinctive fluted appearance of the Monotube is functional, for it makes the column more rigid and stronger than a round column. However, the Maryland State Highway Administration discontinued the use of monotubes during the last decade of the twentieth century due to the belief that its thin shell was subject to failure. The pile continues to be produced by the Monotube Pile Corporation and utilized elsewhere for bridges and other structures.

The US 13 Northbound Bridge is approximately 215 long and 35 feet wide, with a vertical clearance above the railroad tracks of about 24 feet. When constructing a bridge over railroad tracks, if there is no prudent and cost-effective way to create sufficient distance from the tracks to the bridge abutments, crash walls must be erected. Due to design constraints—the tracks were already in place in the mid 1950s and ran through a ravine—crash walls were required for this bridge. As is standard when designing a structure that spans existing railroad tracks, the Commission utilized two sets of standards in designing the crash walls, those of the American Railroad Engineering Association or AREA (now the American Railway Engineering and Maintenance of Way Association or AREMA) and those of the Pennsylvania Railroad, which owned and operated the rail line when the bridge was built.

9 http://www.engineering.manhattan.edu/civil/CGT/pubs/CaseHist5 2004%20Tapertube.pdf; http://www.monotube.com.

¹⁰ Letter of April 6, 2004, from Richard Ervin of the Maryland State Highway Administration to Stephen W. Tull of URS Corporation.

9. Major Bibliographical References

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See Continuation Sheet

10. Geographical Data							
Acreage of surveyed property Acreage of historical setting Quadrangle name	Pocomoke City, MD-VA	Quadrangle scale:	1:24,000				

Verbal boundary description and justification

The US 13 Northbound Bridge carries US 13 over the CSX Railroad tracks in Somerset County just north of Pocomoke City. The bridge has been associated with this site since its construction.

11. Form Prepared by						
name/title	Marvin Brown / Mary E. Crowe and Stan Popovich					
organization	URS Corporation / Hardlines Design Company	date	October 2004			
street & number	200 Orchard Ridge Drive / 4608 Indianola Avanue	telephone	301-258-9780 / 614-784-8733			
city or town	Gaithersburg / Columbus	state	MD / OH			

The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to:

Maryland Historical Trust DHCD/DHCP 100 Community Place Crownsville, MD 21032-2023 410-514-7600

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"Delaware Highway Information" http://www.aaroads.com/delaware/us-013.htm

"Federal Census Figures" < http://www.census.gov/population/cencounts/md190090.txt>.

Letter of April 6, 2004, from Richard Ervin of the Maryland State Highway Administration to Stephen W. Tull of URS Corporation.

"Monotube technology" < http://www.engineering.manhattan.edu/civil/CGT/pubs/CaseHist5_2004%20Tapertube.pdf

Spero, P.A.C., & Company, Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report, 1995.

State Roads Commission, On Our Way, 1957.

State Roads Commission, Proposed Twelve-Year Program for Road Construction and Reconstruction, 1954-1965, 1952.

State Roads Commission, Report of the State Roads Commission of Maryland, 1956.

"US 13 information" < http://www.mdroads.com/routes/us013.html>

Sources Consulted:

Maryland SHA Cultural Resource Library and Bridge Engineering Department, Baltimore - Reports published by or for the State Roads Commission, bridge files

Maryland Highway Administration, District 1 Office, 660 West road, Salisbury MD, 410-677-4000

Maryland Historical Trust Library, Crownsville - Inventory of Historic Places, National Register Nominations, Determinations of Eligibility, Cultural Resource Reports

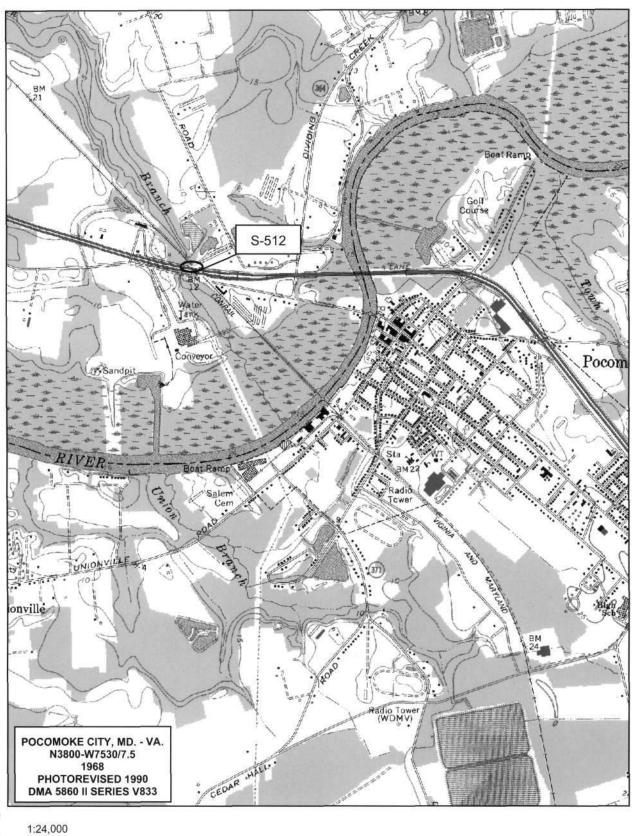
Maryland State Archives, Annapolis - photographs from the Sarikas Collection and materials published by the State Roads Commission

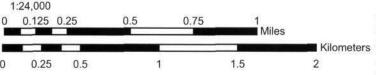
Enoch Pratt Library (Maryland Room), Baltimore - vertical files dealing with Maryland bridges

<u>Library of Congress</u>, Washington, DC - General information on bridges and additional Maryland bridge material

New Jersey State Library, Trenton - Engineering News-Record on microfilm

New York Public Library, (Science, Business, and Industry Library), New York - Additional SHA annual reports





MIHP # S-512
Bridge 1900401
US 13 NB over CSX (Norfolk & Southern) Railroad
Pocomoke City
Somerset County
Pocomoke City, MD.-VA. Quadrangle



MIHP # S-512 Bridge # 1900401, US 13 NB OVER 5 20 Revisored Somerset County, mo Photographer: Stan Popovich, Hardlines Design Company Date: 6/9/03 Location of Negative: no 5HPO looking north down bridge deck



MIHP # 5-512 Bridge # 1900401, US 13 NB over CSX and Railroad Somerset County, MD Photographer: Stan Popuich, Hardlines Design Company Date: 6/9/03. Location of Negative: MD SHPO looking south down bridge deck 217



M140年5-512 Bridget 1900401, US 13, NB over CSX all Railroad Somerset County, mo Photographer: Stan Popovich, Hardlines Design Company Date: 6/9/03 Location of Negative: MP 5490 looking west at east elevation 37



MIHP #5-512 Bridge # 1900401, US 13 NB over CXX will Railroad Somerset County, MD Photo grapher: Stan Popovich, Hardlines Design Company Dote: 6/9/03 Location of Negative: mp SHPO looking east at west elevation 417



Bridge # 1900401, US 13 NB over CESXIL Railroad Somerset County, MD Photographer: San Popovich, Hardlines Design Company Date: 6/9/03 Location of Negative: mo SHPO looking southeast at south pier from ground



MIYP# 5-512 Bridge # 1900401, US 13 NB over G5Xil Railroad Somerset County, Mp Photographer: Stan Popovich, Hardines Design Company Date: 6903 Location of Negative: MD SHPD looking southeast at south pier from SB bridge 6/7



MINP#5-512 Bridge # 1900401; US 13 NB over CBXIL Railroad Somerset Ordinaty, MD Photographer: Stan Roparich, Hardlines Design Company Oate: 6/9/03 Location of Negative: MO 5440 detail of date and railing at northwest corner